

We claim:

1. On a computerized device including a processor, a remote access service, and a hardware device communicating with remote resources, a method of managing connections comprising:
 - 5 receiving a status indication from the remote access service;
 - recording a status indication in a connection status data structure with plural status identifier counts;
 - determining a highest count of said plural status identifier counts in the connection status data structure; and
 - 10 invoking an action identified in a threshold based status response data structure as corresponding with the determined highest count status identifier.
2. The method of claim 1 wherein the status indication is received in response to a connection request.
3. The method of claim 1 wherein the status indication is an error code
15 indicating a busy telephone line, and the invoked action sets a disable flag associated with the busy telephone line.
4. The method of claim 3 wherein the disable flag disables the busy telephone line at least until a new telephone book is received.
5. The method of claim 1 wherein the status indication is received in
20 response to an inquiry about an established connection.
6. The method of claim 3 wherein upon a next connection request session after a present session, input parameters to the next connection request comprise the next telephone number in the phone book after the busy telephone line.

7. The method of claim 1 wherein the connection status data structure comprises an XML file.

8. The method of claim 1 where the invoked action further comprises resetting the highest count status identifier.

5 9. The method of claim 1 wherein the invoked action comprises displaying a graphical user interface indicating a set of two or more actions that may resolve a condition causing the status indication.

10 10. The method of claim 1 wherein the connection status data structure comprises error codes returned on connection requests during multiple connection sessions.

11. The method of claim 10 wherein said multiple connection sessions are wireless.

12. The method of claim 1 wherein the status indication indicates state of an established connection.

15 13. The method of claim 1 performed by a connection manager managing connection requests invoked on the remote access service.

14. The method of claim 13 wherein the remote access service is Open Transport.

20 15. The method of claim 1 wherein the connection status data structure is associated with a phone book data structure.

16. The method of claim 1 wherein the threshold based status response data structure indicates no action on plural rows of the action column.

17. The method of claim 1 wherein the threshold based status response data structure identifies a same action for several status based threshold responses.

5 18. The method of claim 1 further comprising sending a copy of the connection status data structure out on a connection.

19. The method of claim 18 further comprising receiving a new connection status data structure on a connection.

20. The method of claim 18 further comprising receiving a new threshold
10 based status response data structure on a connection.

21. The method of claim 20, further comprising receiving plural new methods identified in the new threshold based status response data structure.

22. The method of claim 21 wherein the received new threshold based status response data structure is received as an XML file.

15 23. A computer-readable medium having executable instructions for performing a method comprising:

receiving a connection request;

determining a highest count for a status indication;

determining a threshold based status response with a threshold value

20 corresponding to the determined highest count;

performing the threshold based status response;

obtaining input parameters for a connection call;

invoking the connection call on a remote access service; and
recording a connection status indicator received in response to the connection
call.

24. The computer-readable medium of claim 23 wherein the executable
5 instructions further comprise instructions for:

returning a connection handle to an entity sending the received connection
request; and

receiving the connection handle in a disconnection request received from the
entity.

10 25. The computer-readable medium of claim 23 wherein the highest count is
for all status indication records in a status data structure.

26. The computer readable medium of claim 25 wherein the executable
instructions further comprise instructions for sending the status data structure out on an
established connection and receiving a new status data structure on an established
15 connection.

27. The computer-readable medium of claim 23 wherein the executable
instructions further comprise instructions for determining threshold based status
responses from a threshold based status response data structure.

28. The computer-readable medium of claim 27 wherein the executable
20 instructions further comprise instructions for receiving new threshold based status
response data structure on an established connection and using the received data
structure for determining threshold based status responses.

29. The computer-readable medium of claim 23 wherein the obtained input parameters contain a property changed by the performed threshold based status response.

30. The computer-readable medium of claim 23 wherein upon executing the
5 instructions a dial-up connection is established.

31. The computer-readable medium of claim 23 wherein upon executing the instructions a wireless connection is established.

32. A computer system comprising:
a processor coupled to memory;
10 software in memory comprising:
a remote access service;
a status data structure;
a status threshold response data structure;
threshold based status responses; and
15 a connection manager for establishing and managing a connection to a
remote resource wherein the connection manager includes instructions that invoke
methods on the remote access service, receive connection status indications from the
remote access service, count status indications in the status data structure, and invoke
threshold based status responses when a status threshold value in the status threshold
20 response data structure corresponds with a status count in the status data structure.

33. The system of claim 32 further comprising internal hardware for transmitting and receiving communications via the connection.

34. The system of claim 33 wherein the connection is via a wireless protocol.

35. The system of claim 32 wherein the connection manager includes instructions that receive a connection request directly from an application.

5 36. The system of claim 32 wherein the connection manager includes instructions that send the status data structure to a remote server, receive a new status data structure, and count subsequent status indications in the new status data structure.

37. The system of claim 32 wherein the connection manager includes instructions that receive a new status threshold response data structure and one or more
10 threshold based status responses.